



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,660	09/27/2001	Michael Steinberger	32301W214	8944

7590 07/31/2003
SMITH, GAMBRELL & RUSSELL, LLP
ATTORNEYS AT LAW
SUITE 800
1850 M STREET, N.W.
WASHINGTON, DC 20036

EXAMINER

SOOHOO, TONY GLEN

ART UNIT	PAPER NUMBER
----------	--------------

1723

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/963,660

Applicant(s)

STEINBERGER ET AL.

Examiner

Tony G Soohoo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20 and 27 is/are allowed.
- 6) ☒ Claim(s) 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Upon reconsideration, the restriction requirement made in Paper No. 7 is hereby withdrawn and an examination of all claims is made below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 21-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 points out "a receiving container" in line 4, and also in line 9, "a receiving container". The claim appears to use the same name for different elements, or fails to positively identify that the "a receiving container" as referred to in the second instance is the same as that of the "receiving container" as referred to in the first instance.

The claim appears to claim two different distinct elements of "a plurality devices for metering the individual components" in lines 3-4 and that of the element in lines 5-7, "each control system having a flow-measuring device and in a regulating element for regulating the rate of flow and a regulator unit enabling a quantitatively proportional metering of the components".

The claim fails to clearly point out a distinction of the two element since both elements provide "metering".

Art Unit: 1723

Furthermore, the claim can not be read to mean that the "plurality devices for metering the individual components" is meant as a pump 4,5,6, and the device which causes "enabling a quantitatively proportional metering of the components" as being the positive claimed flow meter 8,9,10, and regulation valves 34,35,36, since the claim further positively points out in claim 21, line 10-12, a pump and a device for further maintaining constant feed pressure between the containers upstream from the control system.

Thus, it appears that each container has two devices for "metering" which is unsupported in the specification.

For examination purposes, the phrase "a plurality devices for metering the individual components" in lines 3-4 and that of the element in lines 5-7, is being read as encompassing both subsystems of the pump and control system, while the phrase "each control system having a flow-measuring device and in a regulating element for regulating the rate of flow and a regulator unit enabling a quantitatively proportional metering of the components" is being read as a clarification of the subsystem of the control system part.

Nonetheless clarification is needed.

Claim 22 claims the option of a metering pump. However the claim 21 previously pointed out a the pump. Thereby claiming the same element twice. The claim should clearly point out that the previously state flow measure device is a mass flow meter, and that the broadly recited pump of claim 21 is a metering pump.

Art Unit: 1723

Claim 23 appears to claim the same element of the pump (of lines 10-12 of claim 21) between the storage and the control thereby claiming the same element twice.

Claim 24 is unclear in scope in "devices for process management engineering", since 35 USC 112, 6th paragraph has not been invoked, the positive scope of the coordination, measurements and regulators are unclear and vague in the claim. Furthermore it appears that the control devices as claimed in claim 21 has already claimed such a device which measures and regulates, thus the claim appears to claim the same element twice.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caedo et al 4964,732 in view of Brazelton 4642222.

The CAEDO (et al) reference discloses a mixing system having plural storage containers 1,4 (seen figure 3); plural devices for metering the individual components as seen along each lines 21 from the outlet of the containers 1,4; and inherently a receiving container at the end of the line 17 to hold the mixture flowing from the line 17 (since if there were inherently no container at the end of the line 17, the mixture would

Art Unit: 1723

be dispensed to the floor and wasted); a line 21 from each storage container 1, 4 having a control system 9 10, 15; each control system having a flow measuring flow meter 10 and a controller valve 15 in response to the control device 10 for proportional metering; and plural lines down stream of the control system leading into line 17 to fed to a container (not shown) at the end of line 17 after all lines have been guided together at line 17; and there being plural pumps 5,5, to provide pressure between the containers 1,4 and associated control systems 9, 10, 15 arranged upstream from said respective control systems.

The CAEDO reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of a feed pressure regulation device for maintaining constant feed pressure with the pump 5 (figure 1) being between the containers 1,4, and the associated control system 9, 10, 15.

The device to BRAZELTON (Figure 1) teaches that a feed system line may have a source 41, a downstream a pump 43, a further downstream pressure regulator 44 which feds to a further flow meter 45 for proportioning a fluid to the mixture point 54 whereby the pressure regulator provides and maintains appropriate pressure feed irrespective of variations in the inlet pressure.

In view of the teaching that a pressure regulator between the source and flow meter provides and maintains appropriate pressure feed irrespective of variations in the inlet pressure, it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the feed line of CAEDO with a pressure regulator prior to the flow meter of CAEDO so that regulator provides and maintains appropriate pressure feed

Art Unit: 1723

irrespective of variations in the inlet pressure for a more precise feed of liquid for measurement.

With regards to claim 22, note that CAEDO shows a pump 5 and a flow meter 10. It is known that meter pumps, and mass flow meters are known functional equivalent structures for performing pumping and measuring flow, thus it is deemed that it would have been obvious, , to one of ordinary skill in the art to substitute without undue experimentation, for the pump 5 or flow meter 10 with the known functional equivalent pump or flow meters such as a meter pump or mass-flow meter so as to provide a more easily constructed device.

With regards to claim 23, note that the combination as discussed above of CAEDO in view of BRAZELTON would result in plural pump and devices for constant pressure between the tanks and control system.

With regards to claim 24, note that the plural devices of the controls 9,9 , pumps 5,5, flow meters 10,10 and regulation valves 15, 15 provides way to produce a process management for coordination of the flows with one another.

With regards to claim 25-26, note that CAEDO shows a static mixer 13.

Allowable Subject Matter

6. Claims 1-20, 27 are allowed.

Conclusion

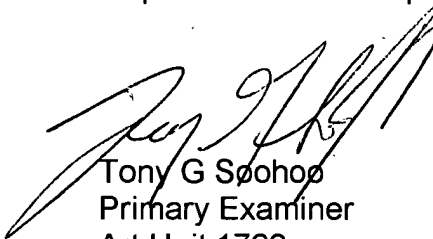
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following disclose flow control devices and methods of controlling proportional flow: Tilgner et al 4399105, Jones 5823669, Waters 3266780,

Art Unit: 1723

Koenig et al 3425668, Hiroi 4621927, Jones et al 5423607, Nakamura et al 5482368, Edwards 5676461, Kobayashi 4614438, Cox et al 4433701, Volk, Jr et al 5332311, Patel et al 5340210, Hauser 3773300, Florentini 4096585, Fahy et al 4427298, Chapman 5674382, Woodle 3608869.

The following disclose methods of producing peroxydicarboxylic acid: Hardy et al 4267124, Hutchins et al 4244884, and Hofen et al 4088676.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G Soohoo whose telephone number is (703) 308-2882. The examiner can normally be reached on 7:00 AM - 5:00 PM, Tues. - Fri.. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Tony G Soohoo
Primary Examiner
Art Unit 1723

tgs